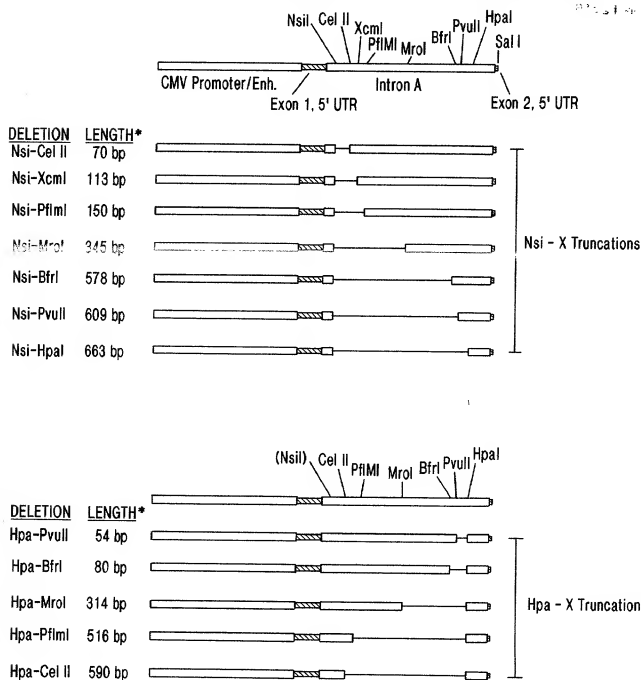


FIG. 2

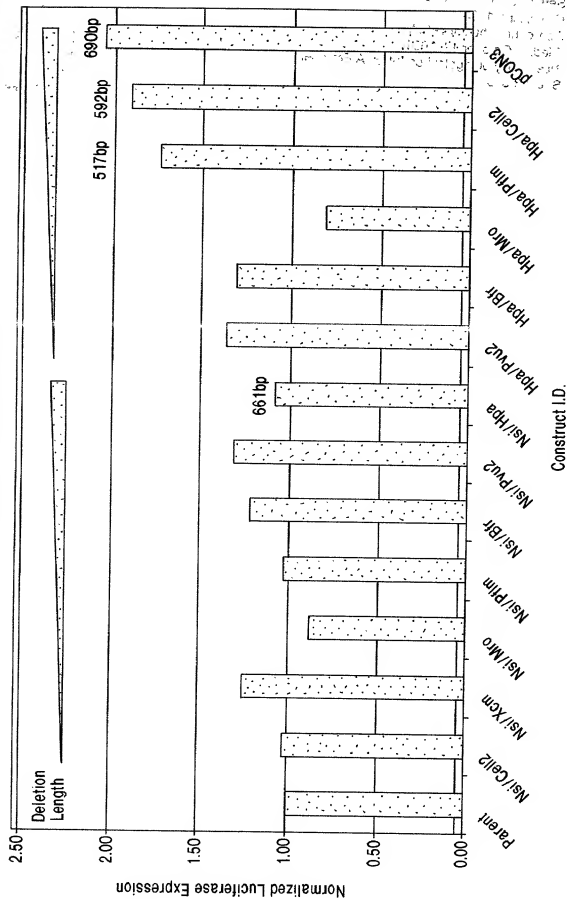
# Deletions Made Within Intron A of CMV IE1



\*Following restriction enzyme digestion, building, religation

FIG. 3

Intron A Internal Deletion Mutants  
(Transiently-Transfected 293 cells)



Construct I.D.

FIG. 4

1. Wild Type Rabbit  $\beta$ -Globin Sequence

GTTGGTATCCTTTTACAGCACAACTTAATGAGACAGATAGAAACTGGTCTGTGTAGAAACA  
Splice Donor

GAGTAGTCGCCTGCTTTTCTGCCAGGTGCTGACTTCTCTCCCTGGGCTGTTTTCATTTTCTCAG

Branch Pt.

Polypyrimidine Tract

FIG. 5A

2. Optimized Rabbit  $\beta$ -Globin Sequence

GTAAGTATCCTTTTACAGCACAACTTAATGAGACAGATAGAAACTGGTCTGTAGAAACA  
Splice Donor

GAGTAGTCGCCTGCTTTTCTGCCAGGTACTAACTTCTCTCCCTCTCCTCTTTTCTTTTCTGCAG

Branch Pt.

Polypyrimidine Tract

FIG. 5B

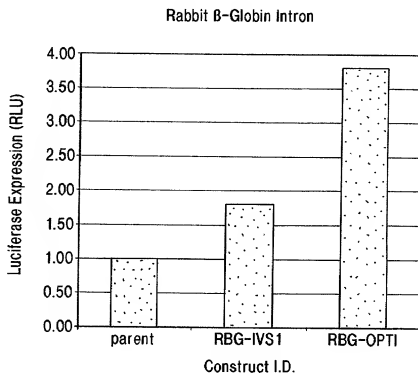
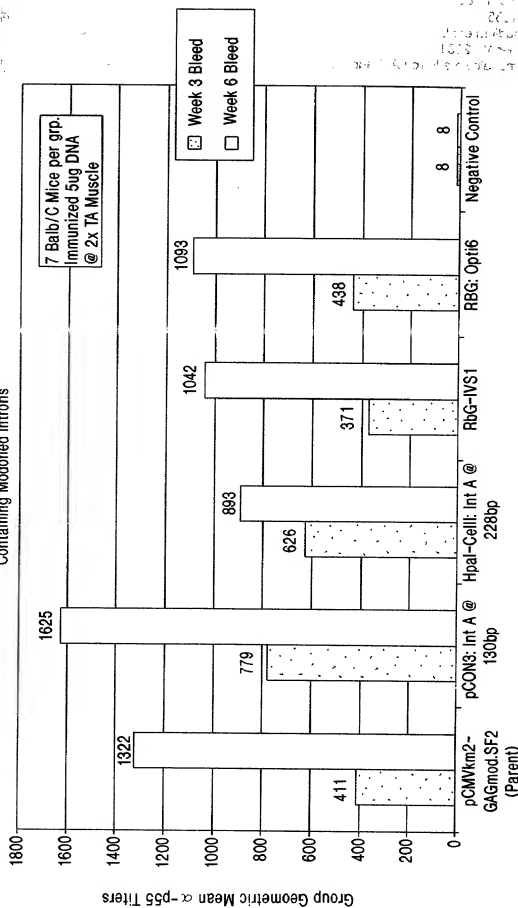


FIG. 6

In Vivo Immunogenicity of Plasmid Vectors  
Containing Modified Introns



Immunizing Vector DNA

FIG. 7